UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable



UNIVERSAL TREATMENT STANDARDS NOTE: NA means not applicable			
		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS <sup>1</sup> Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as "mg/l TCLP"
Organic Constituents			
A2213 <sup>6</sup>	30558-43-1	0.042	1.4
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	38
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylamide	79-06-1	19	23
Acrylonitrile	107-13-1	0.24	84
Aldicarb sulfone <sup>6</sup>	1646-88-4	0.056	0.28
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066
Barban <sup>6</sup>	101-27-9	0.056	1.4
Bendiocarb <sup>6</sup>	22781-23-3	0.056	1.4
Bendiocarb phenol <sup>6</sup>	22961-82-6	0.056	1.4
Benomyl <sup>6</sup>	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8

		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name Benzo(k)fluoranthene (difficult to distinguish from	<b>CAS<sup>1</sup> Number</b> 207-08-9	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg³ unless noted as "mg/l TCLP" 6.8
benzo(b)fluoranthene)			
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Bromomethane/Methyl bromide	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butylate <sup>6</sup>	2008-41-5	0.042	1.4
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol/Dinoseb	88-85-7	0.066	2.5
Carbaryl <sup>6</sup>	63-25-2	0.006	0.14
Carbenzadim <sup>6</sup>	10605-21-7	0.056	1.4
Carbofuran <sup>6</sup>	1563-66-2	0.006	0.14
Carbofuran phenol <sup>6</sup>	1563-38-8	0.056	1.4
Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
Carbosulfan <sup>6</sup>	55285-14-8	0.028	1.4
Chlordane (alpha and gamma isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
2-Chloroethyl vinyl ether	110-75-8	0.062	NA

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		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS <sup>1</sup> Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as "mg/l TCLP"
Chloromethane/Methyl chloride	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
m-Cumenyl methylcarbamate <sup>6</sup>	64-00-6	0.056	1.4
Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
1,2-Dibromoethane/Ethylene dibromide	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14

		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS <sup>1</sup> Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as "mg/l TCLP"
2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethylene glycol, dicarbamate <sup>6</sup>	5952-26-1	0.056	1.4
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
2-4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Dimetilan <sup>6</sup>	644-64-4	0.056	1.4
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Dithiocarbamates (total) <sup>6</sup>	NA	0.028	28
Endosulfan I	959-98-8	0.023	0.066
Endosulfan II	33213-65-9	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13

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		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS <sup>1</sup> Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as "mg/l TCLP"
Endrin aldehyde	7421-93-4	0.025	0.13
EPTC <sup>6</sup>	759-94-4	0.042	1.4
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl cyanide/Propanenitrile	107-12-0	0.24	360
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Formetanate hydrochloride <sup>6</sup>	23422-53-9	0.056	1.4
Formparanate <sup>6</sup>	17702-57-7	0.056	1.4
Heptachlor	76-44-8	0.0012	0.066
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170

		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	<b>CAS<sup>1</sup> Number</b> 465-73-6	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg³ unless noted as "mg/l TCLP" 0.066
Isodrin Isolan <sup>6</sup>	119-38-0	0.021	1.4
Isosafrole	120-58-1	0.036	2.6
Kepone	143-50-0	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 mg/l TCLP
Methapyrilene	91-80-5	0.081	1.5
Methiocarb <sup>6</sup>	2032-65-7	0.056	1.4
Methomyl <sup>6</sup>	16752-77-5	0.028	0.14
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Metolcarb <sup>6</sup>	1129-41-5	0.056	1.4
Mexacarbate <sup>6</sup>	315-18-4	0.056	1.4
Molinate <sup>6</sup>	2212-67-1	0.042	1.4
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
o-Nitroaniline	88-74-4	0.27	14
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
o-Nitrophenol	88-75-5	0.028	13
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	2.3

		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS¹ Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as "mg/l TCLP"
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	0.000063	0.000063
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	0.000063	0.005
Oxamyl <sup>6</sup>	23135-22-0	0.056	0.28
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pebulate <sup>6</sup>	1114-71-2	0.042	1.4
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
o-Phenylenediamine <sup>6</sup>	95-54-5	0.056	5.6
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine <sup>6</sup>	57-47-6	0.056	1.4
Physostigmine salicylate <sup>6</sup>	57-64-7	0.056	1.4
Promecarb <sup>6</sup>	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham <sup>6</sup>	122-42-9	0.056	1.4

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		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS <sup>1</sup> Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg³ unless noted as "mg/l TCLP"
Propoxur <sup>6</sup> Prosulfocarb <sup>6</sup>	114-26-1	0.056	1.4
	52888-80-9	0.042	1.4 8.2
Pyrene Pyridine	129-00-0 110-86-1	0.067	16
Safrole	94-59-7	0.014	22
Silvex/2,4,5-TP	93-72-1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Thiodicarb <sup>6</sup>	59669-26-0	0.019	1.4
Thiophanate-methyl <sup>6</sup>	23564-05-8	0.056	1.4
Tirpate <sup>6</sup>	26419-73-8	0.056	0.28
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Triallate <sup>6</sup>	2303-17-5	0.042	1.4
Tribromomethane/Bromoform	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	93-76-5	0.72	7.9
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
Triethylamine <sup>6</sup>	101-44-8	0.081	1.5

		Wastewater Standard	Nonwastewater Standard
REGULATED CONSTITUENT Common Name	CAS <sup>1</sup> Number	Concentration in mg/l <sup>2</sup>	Concentration in mg/kg <sup>3</sup> unless noted as "mg/l TCLP"
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10
Vernolate <sup>6</sup>	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Inorganic Constituents			
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/I TCLP
Barium	7440-39-3	1.2	21 mg/l TCLP
Beryllium	7440-41-7	0.82	1.22 mg/l TCLP
Cadmium	7440-43-9	0.69	0.11 mg/I TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/I TCLP
Cyanides (Total) <sup>4</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>4</sup>	57-12-5	0.86	30
Fluoride <sup>5</sup>	16984-48-8	35	NA
Lead	7439-92-1	0.69	0.75 mg/l TCLP
Mercury - Nonwastewater from Retort	7439-97-6	NA	0.20 mg/l TCLP
Mercury - All Others	7439-97-6	0.15	0.025 mg/ITCLP
Nickel	7440-02-0	3.98	11 mg/l TCLP
Selenium <sup>7</sup>	7782-49-2	0.82	5.7 mg/l TCLP
Silver	7440-22-4	0.43	0.14 mg/l TCLP
Sulfide <sup>5</sup>	18496-25-8	14	NA
Thallium	7440-28-0	1.4	0.20 mg/l TCLP
Vanadium <sup>5</sup>	7440-62-2	4.3	1.6 mg/l TCLP
Zinc <sup>5</sup>	7440-66-6	2.61	4.3 mg/l TCLP

<sup>(1)</sup> CAS means Chemical Abstract Services. When the waste code and/or regulated constituents are described as a combination of a chemical with it's salts and/or ester, the CAS number is given for the parent compound only.

<sup>(2)</sup> Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

<sup>(3)</sup> Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of Title 22, CCR, chapter 14, article 15 or chapter 15, article 15, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in section 66268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

- (4) Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference in section 66260.11, with a sample size of 10 grams and a distillation time of one hour and 15 minutes.
- (5) These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition in section 66260.10.
- (6) Between August 26, 1997, and August 26, 1998, these constituents are not "underlying hazardous constituents" as defined in section 66260.10 of this division.
- (7) This constituent is not an underlying hazardous constituent as defined in section 66260.10 of this division because its UTS level is greater than its TC level, thus a treated selenium waste would always be characteristically hazardous, unless it is treated to below its characteristic level.
- (8) This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to D004-D011 only. NOTE: NA means not applicable.

NOTE: Authority cited: Sections 25150, 25159, 25159.5, 25179.6 and 58012, Health and Safety Code. Reference: Sections 25159, 25159.5 and 58012, Health and Safety Code; 40 CFR Section 268.48.

## **HISTORY**

- 1. New section and Table filed 10-24-94 as an emergency; operative 10-24-94 (Register 94, No. 43). A Certificate of Compliance must be transmitted to OAL by 2-20-95 or emergency language will be repealed by operation of law on the following day.
- 2. New section and Table refiled 2-21-95 as an emergency: operative 2-21-95 (Register 95, No. 8). A Certificate of Compliance must be transmitted to OAL by 6-21-95 or emergency language will be repealed by operation of law on the following day.
- 3. New section and Table refiled 6-19-95 as an emergency; operative 6-19-95 (Register 95, No. 25). A Certificate of Compliance must be transmitted to OAL by 10-17-95 or emergency language will be repealed by operation of law on the following day.
- 4. New section and Table refiled 10-16-95 as an emergency; operative 10-16-95 (Register 95, No. 42). A Certificate of Compliance must be transmitted to OAL by 2-13-96 or emergency language will be repealed by operation of law on the following day.
- 5. Certificate of Compliance as to 10-24-94 order transmitted to OAL 12-15-95 and filed 1-31-96 (Register 96, No. 5).
- 6. Change without regulatory effect repealing and adopting new table filed 6-4-99 pursuant to section 100, title 1, California Code of Regulations (Register 99, No. 23).

  7. Change without regulatory effect amending Table "Universal Treatment Standards" filed 9-11-2000 pursuant to
- section 100, title 1, California Code of Regulations (Register 2000, No. 37).
- 8. Change without regulatory effect amending Table, "Universal Treatment Standards" filed 7—3—2002 pursuant to section 100, title 1, California Code of Regulations (Register 2002, No. 27).

## §66268.49. Alternative LDR Treatment Standards for Contaminated Soil.

(a) Applicability. You shall comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste, or exhibited a characteristic of hazardous waste at the time it was generated, into a land disposal unit. The following chart describes whether you shall comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

If LDRs	And If LDRs	And If	Then You
applied to the listed waste when it contaminated the soil*	apply to the listed waste now		shall comply with LDRs
didn't apply to the listed waste when it contaminated the soil*	apply to the listed waste now	the soil is determined to contain the listed waste when the soil is first generated	shall comply with LDRs
didn't apply to the listed waste when it contaminated the soil*	apply to the listed waste now	the soil is determined not to contain the listed waste when the soil is first generated	needn't comply with LDRs
didn't apply to the listed waste when it contaminated the soil*	don't apply to the listed waste now		needn't comply with LDRs

<sup>\*</sup> For dates of LDR applicability, see CCR, Title 22, chapter 18, appendix VII. To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill,

<sup>(</sup>b) Prior to land disposal, contaminated soil identified by subsection (a) of this section as needing to comply with LDRs shall be treated according to the applicable treatment standards specified in subsection (c) of this section

or according to the Universal Treatment Standards specified in section 66268.48 applicable to the contaminating listed hazardous waste and/or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in subsection (c) of this section and the Universal Treatment Standards may be modified through a treatment variance approved in accordance with section 66268.44.

- (c) Treatment standards for contaminated soils. Prior to land disposal, contaminated soil identified by subsection (a) of this section as needing to comply with LDRs shall be treated according to all the standards specified in this subsection or according to the Universal Treatment Standards specified in section 66268.48.
  - (1) All soils. Prior to land disposal, all constituents subject to treatment shall be treated as follows:
- (A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment shall achieve 90 percent reduction in total constituent concentrations, except as provided by subsection (c)(1)(C)of this section.
- (B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment shall achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by subsection (c)(1)(C)of this section.
- (C) When treatment of any constituent subject to treatment to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the universal treatment standard is not required. Universal Treatment Standards are identified in section 66268.48 Table UTS.
- (2) Soils that exhibit the characteristic of ignitability, corrosivity or reactivity. In addition to the treatment required by subsection (c)(1) of this section, prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity shall be treated to eliminate these characteristics.
- (3) Soils that contain nonanalyzable constituents. In addition to the treatment requirements of subsections (c)(1) and (2) of this section, prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:
- (A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable constituents to the levels specified in subsections (c)(1) and (2) of this section; or,
- (B) For soil that contains only nonanalyzable constituents, treatment by the method specified in section 66268.42 for the waste contained in the soil.
- (d) Constituents subject to treatment. When applying the soil treatment standards in subsection (c) of this section, constituents subject to treatment are any constituents listed in section 66268.48 Table UTS--Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituents subject to treatment in any given volume of soil which exhibits the toxicity characteristic solely because of the presence of metals
- (e) Management of treatment residuals. Treatment residuals from treating contaminated soil identified by subsection (a) of this section as needing to comply with LDRs shall be managed as follows:
  - (1) Soil residuals are subject to the treatment standards of this section;
  - (2) Non-soil residuals are subject to:
- (A) For soils contaminated by listed hazardous waste, the hazardous waste standards applicable to the listed hazardous waste: and
- (B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

NOTE: Authority cited: Sections 25150, 25159, 25159.5, 25179.5 and 58012, Health and Safety Code. Reference: Sections 25159, 25159.5 and 58012, Health and Safety Code; and 40 CFR Section 268.49.

- 1. Change without regulatory effect adding new section filed 6-4-99 pursuant to section 100, title 1, California Code of Regulations (Register 99, No. 23).
- 2. Change without regulatory effect amending subsections (c)(3)(A)-(B) filed 9-11-2000 pursuant to section 100, title
- 1, California Code of Regulations (Register 2000, No. 37).
- 3. Change without regulatory effect amending subsections (c)(1)(A)—(B) and (d) filed 7—3—2002 pursuant to section 100, title 1, California Code of Regulations (Register 2002, No. 27).